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AMENDMENTS TO THE CLAIMS

- 12. (Original) An SDT junction of a memory cell for an MRAM device, the junction comprising:
- a bottom ferromagnetic layer, the bottom ferromagnetic layer having flattened peaks;

an insulating tunnel barrier atop the bottom ferromagnetic layer; and a top ferromagnetic layer atop the insulating tunnel barrier.

- 13. (Original) The junction of claim 12, wherein angle from the top of a grain to an intersection with an adjacent grain is between about three and six degrees.
- 14. (Original) The junction of claim 12, wherein the flattened peaks have a valley-to-peak height difference of no more than about one nanometer.
- 15. (Original) The junction of claim 12, wherein the junction has a resistance of less than about 10 K Ω - μm^2 .
- 16. (Original) The junction of claim 12, wherein the top and bottom layers are AF coupled; wherein the peaks are flattened to tune the AF coupling to a desired level.



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17. (Currently amended) An MRAM device comprising:

an array of memory cells, each memory cell including an SDT junction, each SDT junction including a bottom ferromagnetic layer, each bottom ferromagnetic layer having an upper surface, each upper surface having a valley-to-peak height variation of no more than about one nanometer;

a plurality of word lines extending along memory cell rows of the array; and a plurality of bit lines extending along memory cell columns of the array.

- 18. (Original) The device of claim 17, wherein resistance variation of the junctions across the entire array is no more than about 4%.
- 19. (Original) The device of claim 17, wherein angle from the top of a grain to an intersection with an adjacent grain is between and three and six degrees.
- 20. (Original) The device of claim 17, wherein the junctions have a resistance of less than about 10 K Ω - μ m².
 - 21. (New) An SDT junction comprising:
 - a bottom ferromagnetic layer having physically altered peaks; an insulating tunnel barrier atop the bottom ferromagnetic layer; and a top ferromagnetic layer atop the insulating tunnel barrier.
- 22. (New) The device of claim 21, wherein the physically altered peaks are flattened.

